

For S/O 120162 (To BE USED ON ASSY B.N. 129562) Ship Feb 27 or sooner
Work Order ID - 129563 ***129563*** Page 1
 Friday, February 13, 2015 2:18:39 PM

Item ID: D5046-3 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Co-Pilot Collective Head
 Start Date: 2/13/15 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 2/20/15 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D5046	A								

100 Cut blanks as per folio 0.00 **DAS 44 9-89 15/02/20**
100
 Bandsaw Memo 0.00
 Jeaspa Bandsaw CUT BLANK AT 5.500"

110 0.00 **DAS 44 9-89 15/02/20**
110
 HAAS 1 Memo 0.00
 HAAS CNC vertical machine #1 MACHINE AS PER DWG & FOLIO FB296/ D5046-3
 FOLIO REV: A
 DWG REV: A
 DO NOT BUFF OR POLISH PART

DEBURR

NOTE: NARROW HEAD, UNDRILLED, NO SWITCH OR ROLL HOLES

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Crosstube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 129563

Friday, February 13, 2015 2:18:39 PM

129563

Page 3

Item ID: D5046-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Co-Pilot Collective Head
Start Date: 2/13/15 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/20/15 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC8- Inspect parts - second check	0.00							DAS 14 9-89
150									
QC	Memo	0.00							
Quality Control									15/02/20
160	Identify as per dwg & Stock Location <u>WAD01</u>	0.00							
160									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.00							
Quality Control									

15/2/23 *[Signature]*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Friday, February 13, 2015 2:18:49 PM

Page 1

Work Order ID: 129563

129563

Parent Item: D5046-3

D5046-3

Parent Item Name: Co-Pilot Collective Head

Start Date: 2/13/15

Required Date: 2/20/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV. A NEW ISSUE JFS 14/04/15 VERIFIED BY: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M6061T6B2.000X05.00
0

Purchased

No

100

f

20.9000

0.459

1

M6061T6B2 000X05 000

**

DAS
44
9.89

15/02/20

6061T6 Bar 2.00 x 5.000

04.500

Location

Loc Qty

Loc Code

MAT004

20.9

128860

8.9

m129972

12

* 126160

→ .459

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

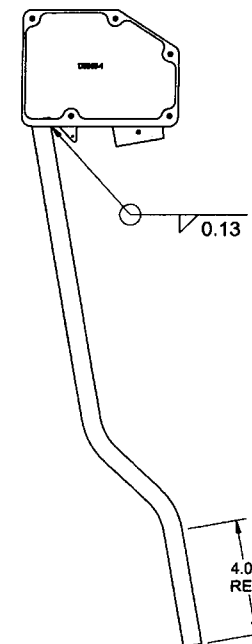
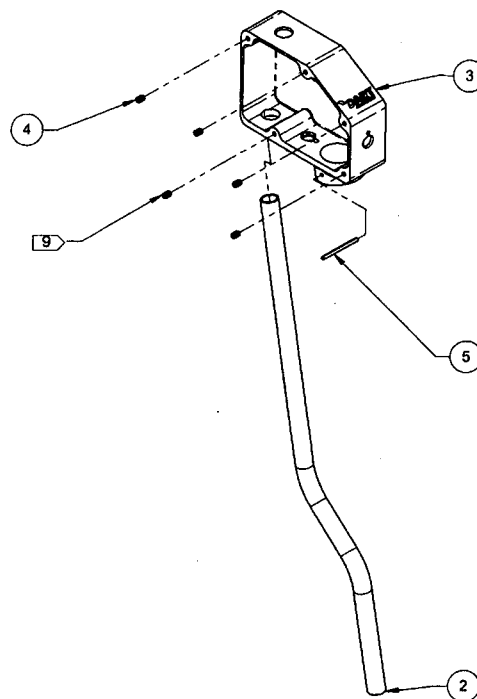
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other _____
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ITEM	QTY	P/N	DESCRIPTION
1	X	D5046-041	CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)
2	1	D4410-7	CONDUIT
3	1	D5046-1	CO-PILOT COLLECTIVE HEAD
4	5	90296A108	HELI-COIL INSERT (6-32 X 0.276)
5	1	MS171539	PIN



D5046-041 WELDING DETAIL

RELEASED
2014-04-01

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.91 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

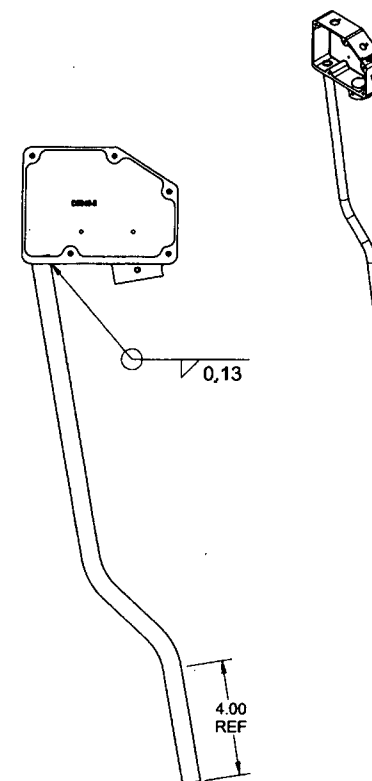
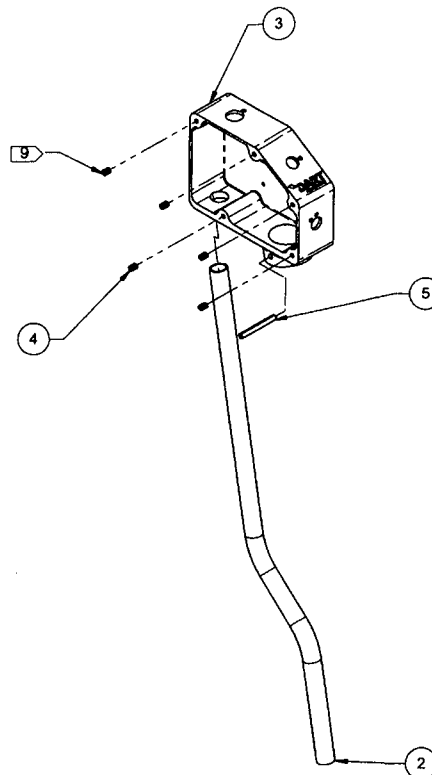
D5046-041 CO-PILOT COLLECTIVE HEAD ASSEMBLY (205)

Handwritten: 18-2-13
129563

APPROVED

A	NEW ISSUE	VS	14.01.22
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 1 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	14.01.22	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

ITEM	QTY -043	P/N	DESCRIPTION
1	X	D5046-043	CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)
2	1	D4410-7	CONDUIT
3	1	D5046-3	CO-PILOT COLLECTIVE HEAD
4	5	90296A108	HELI-COIL INSERT (6-32 X 0.276)
5	1	MS171599	PIN



D5046-043 CO-PILOT COLLECTIVE HEAD ASSEMBLY (212)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.90 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

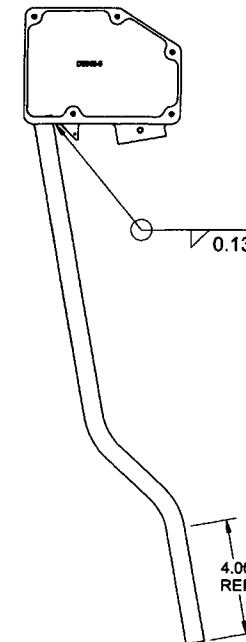
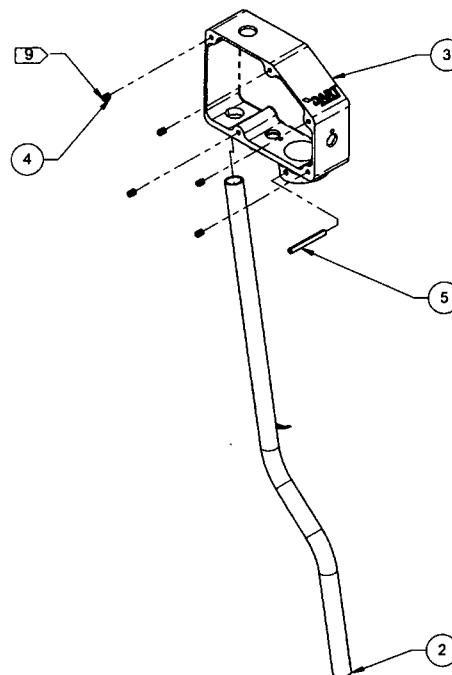
D5046-043 WELDING DETAIL

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 2 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	14.01.22	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
2014-06-04

ITEM	QTY -045	P/N	DESCRIPTION
1	X	D5046-045	CO-PILOT COLLECTIVE HEAD ASSEMBLY (EAGLE SINGLE)
2	1	D4410-7	CONDUIT
3	1	D5046-5	CO-PILOT COLLECTIVE HEAD
4	5	90296A108	HELI-COIL INSERT (6-32 X 0.278)
5	1	MS171599	PIN



D5046-045 WELDING DETAIL

D5046-045 CO-PILOT COLLECTIVE HEAD ASSEMBLY (EAGLE SINGLE)

NOTES:

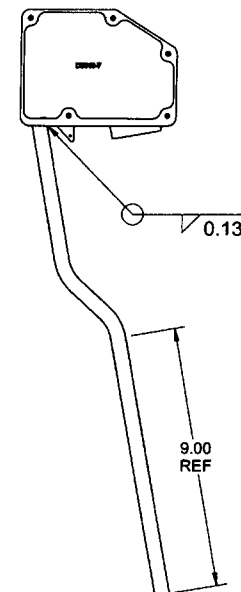
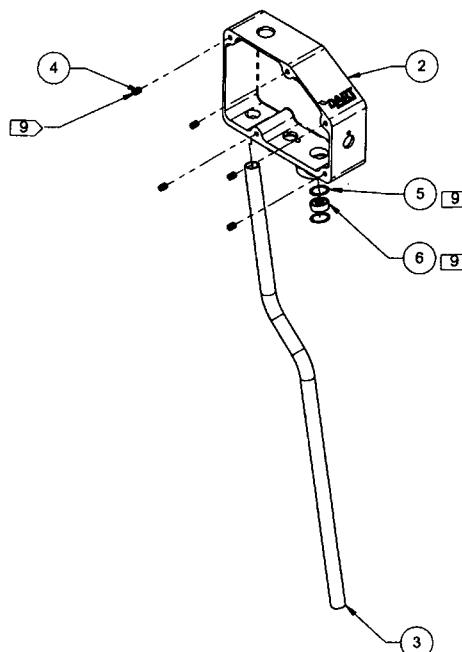
- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.90 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 3 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DSS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	14.01.22	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
2014-04-06

ITEM	QTY	P/N	DESCRIPTION
1	X	D5046-047	CO-PILOT COLLECTIVE HEAD ASSEMBLY
2	1	D5046-7	CO-PILOT COLLECTIVE HEAD
3	1	D5054-1	CONDUIT
4	5	90296A108	HELI-COIL INSERT (6-32 X 0.276)
5	2	D5073-1	SNAP RING
6	1	MS27641-3	BEARING



D5046-047 WELDING DETAIL

D5046-047 CO-PILOT COLLECTIVE HEAD ASSEMBLY
(FOR 205 WITH 204-001-290-5 STICK AND THROTTLE ASSEMBLY INSTALLED)

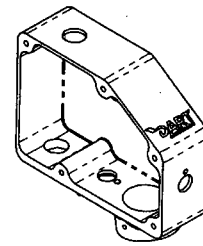
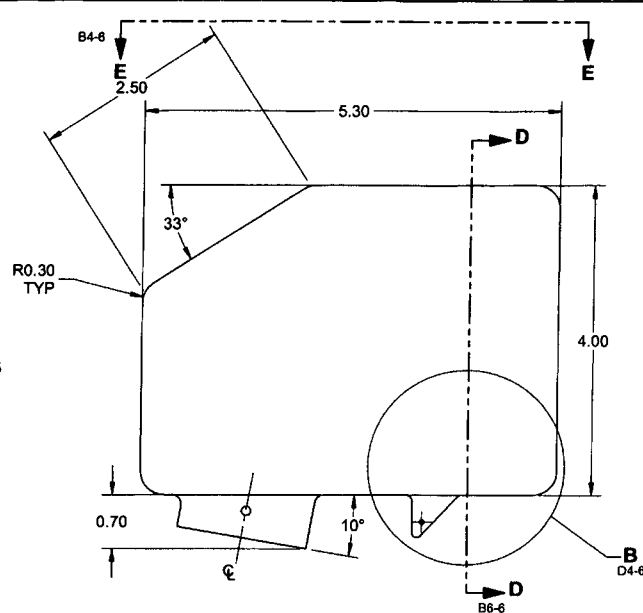
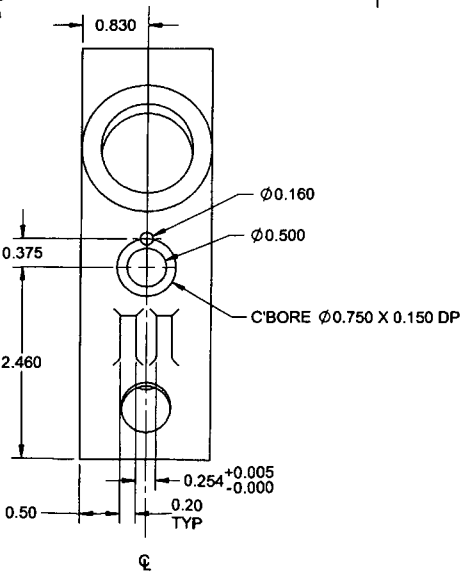
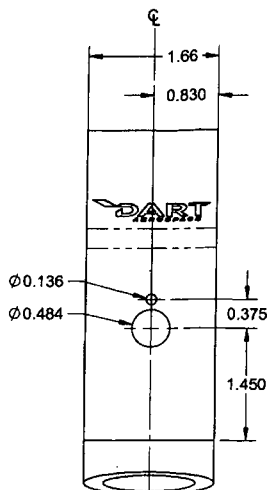
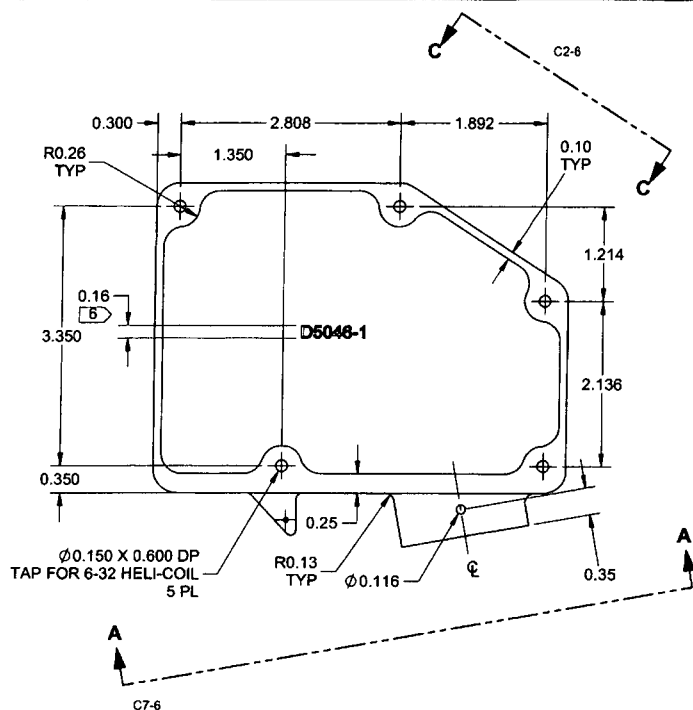
NOTES:

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- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.89 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 4 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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RELEASED
2014-04-04



- NOTES:**
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 IN THIS AREA TO MAX DEPTH
OF 0.010 WITH A MIN. TOOL RAD OF R0.010
 - 7) WEIGHT: 0.74 lbs

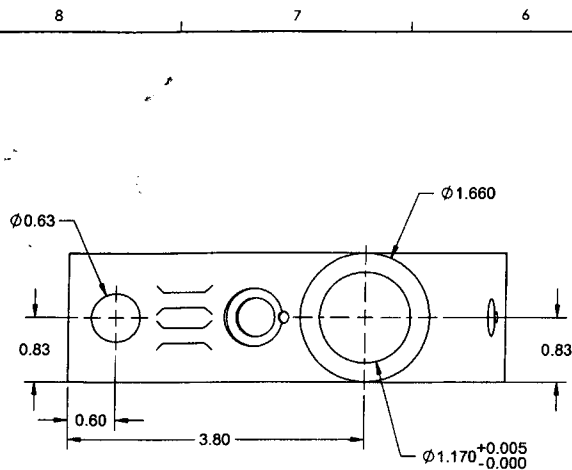
D5046-1 CO-PILOT COLLECTIVE HEAD (205)

APPROVED

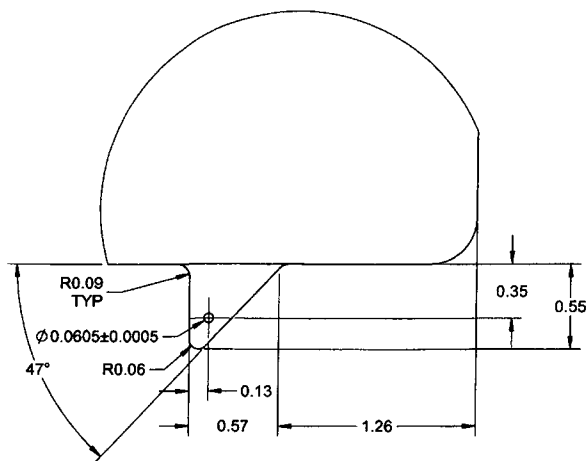
DESIGN	VS
DRAWN	VS
CHECKED	DC
MFG. APPR.	JFS
APPROVED	HS
DE APPR.	DS
DATE	14.01.22

DART AEROSPACE USA, INC. KENT, WA	
DRAWING NO. D5046	REV. A SHEET 5 OF 12
TITLE CO-PILOT COLLECTIVE HEAD	SCALE NTS
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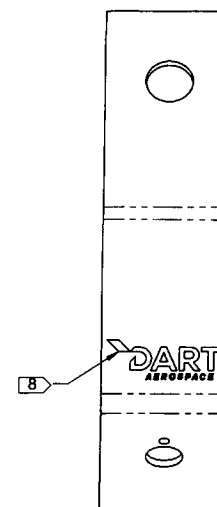
RELEASED
2014-04-04



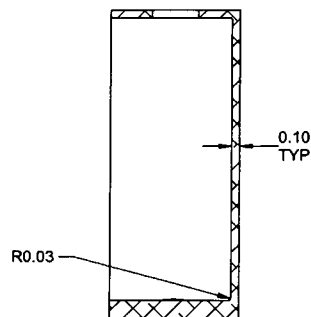
VIEW A-A
B7-5



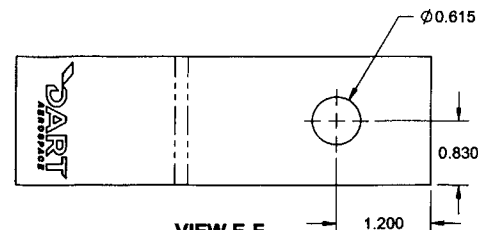
DETAIL B
C2-5



VIEW C-C
D6-5



SECTION D-D
C2-5



VIEW E-E
D3-5

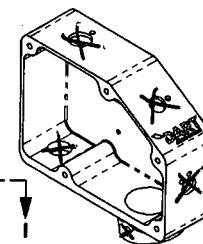
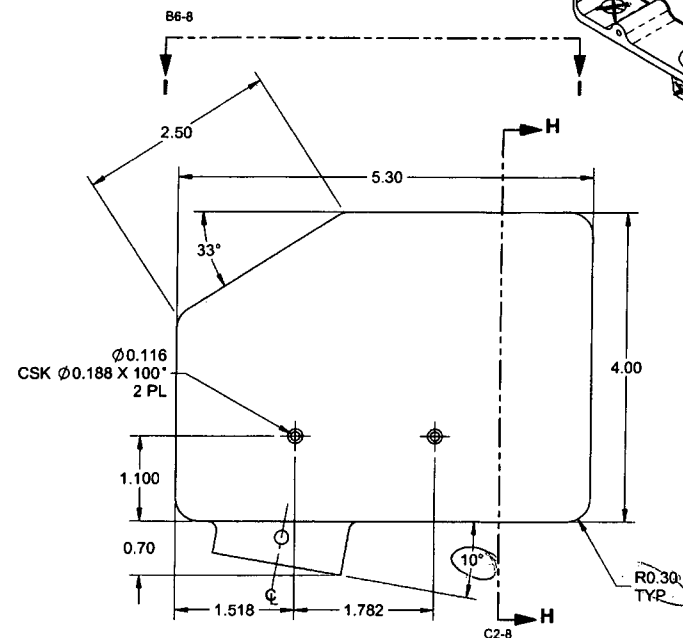
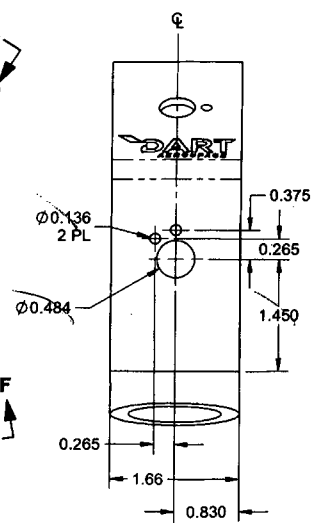
- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.74 lbs
 - 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP

D5046-1 CO-PILOT COLLECTIVE HEAD (205)
DETAIL VIEWS

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 6 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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2014-04-04

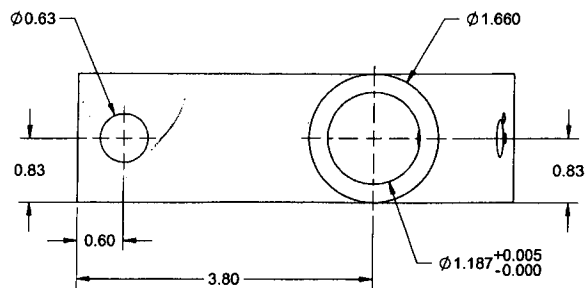


7) WEIGHT: 0.73 lbs

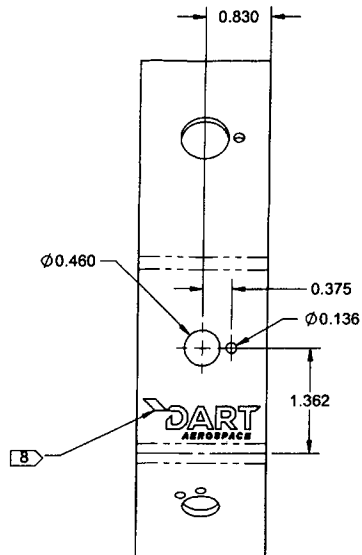
RELEASE
2014-04-04

APPROVED	DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	REV. A SHEET 7 OF 12 SCALE NTS
	DRAWN	VS		
	CHECKED	DC	DRAWING NO.	
	MFG. APPR.	JFS	D5046	
	APPROVED	HS	TITLE	
	DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	
	DATE	14.01.22	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS MADE UP OF THE EXPRESS CONTENT THAT IT IS MAY NOT BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

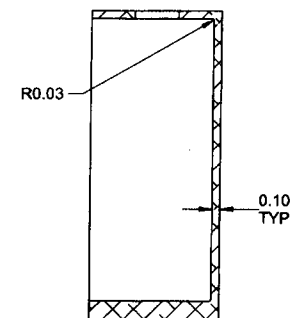
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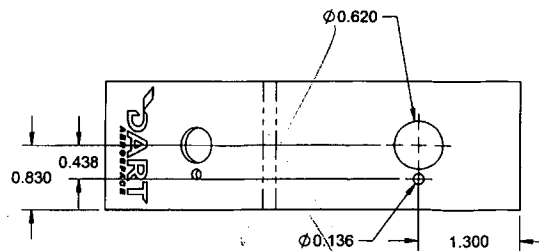
VIEW F-F
B7-7



VIEW G-G
D6-7



SECTION H-H
C2-7



VIEW I-I
D3-7

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.73 lbs
 - 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP

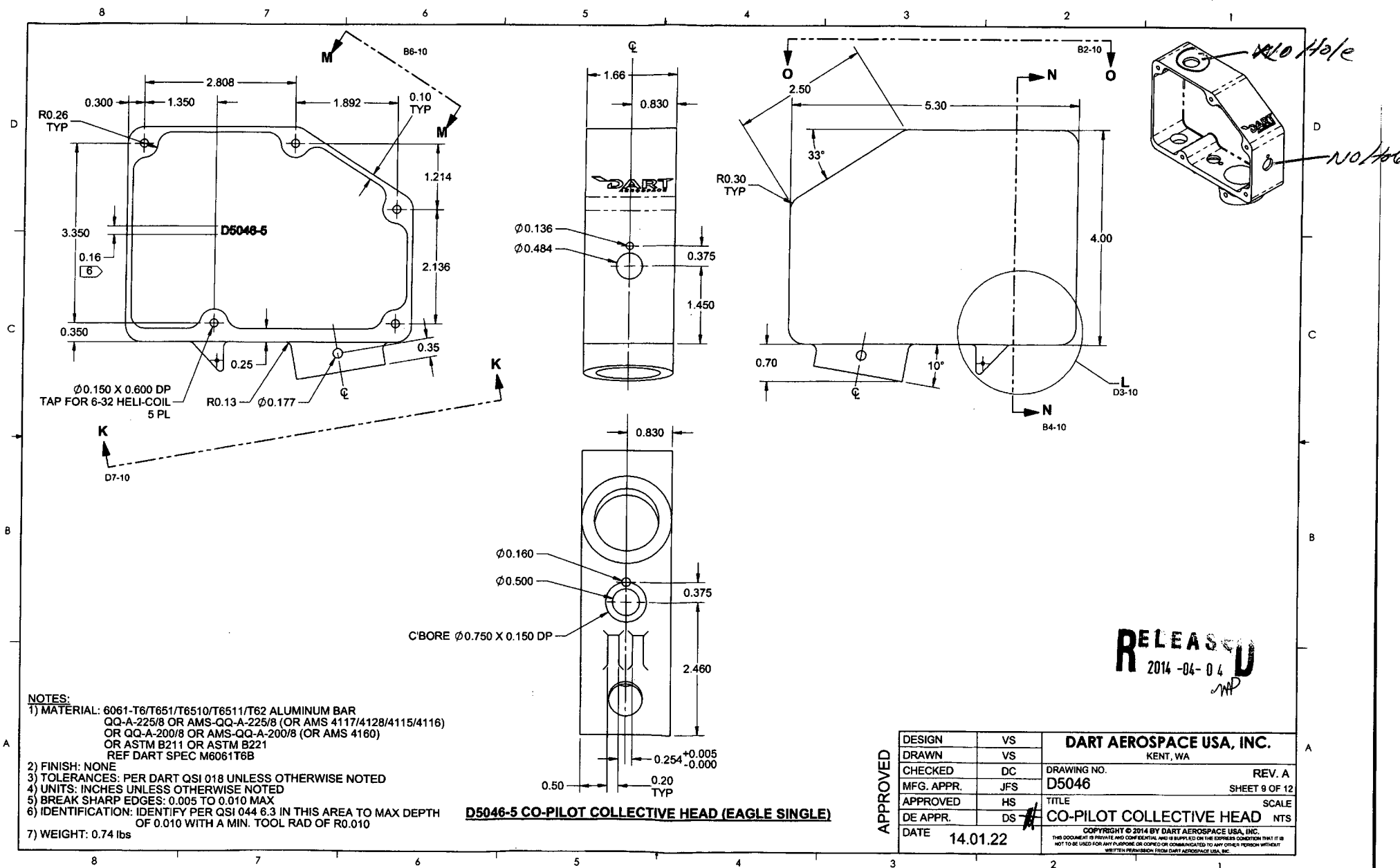
D5046-3 CO-PILOT COLLECTIVE HEAD (212)
DETAIL VIEWS

APPROVED

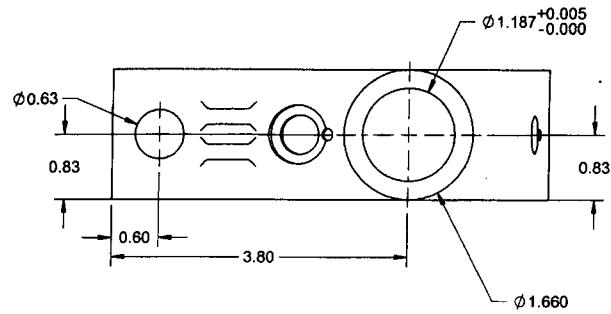
DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 8 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
DATE	14.01.22	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC.	
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2014-04-04

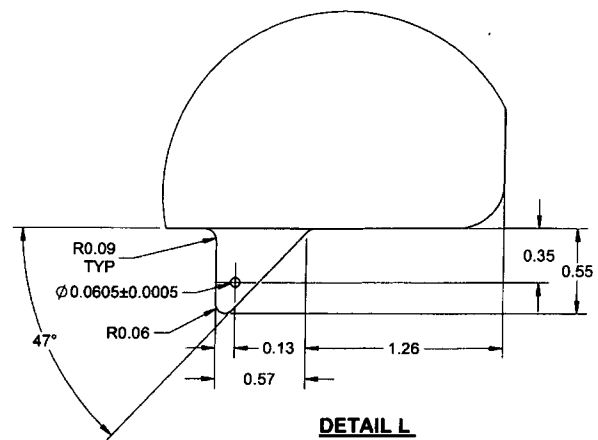
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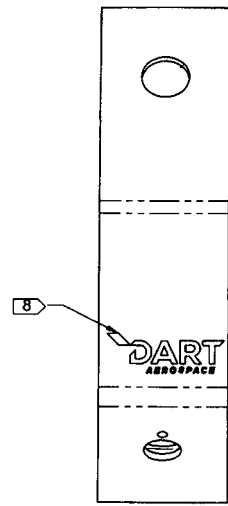
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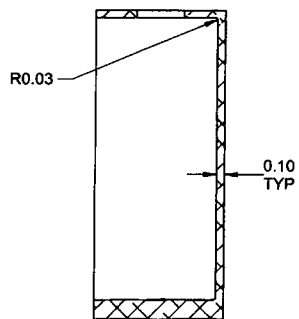
VIEW K-K
B7-9



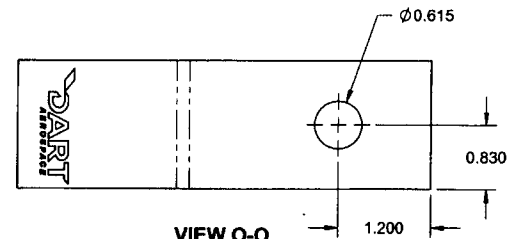
DETAIL L
C2-8



VIEW M-M
D6-9



SECTION N-N
C2-9



VIEW O-O
D3-9

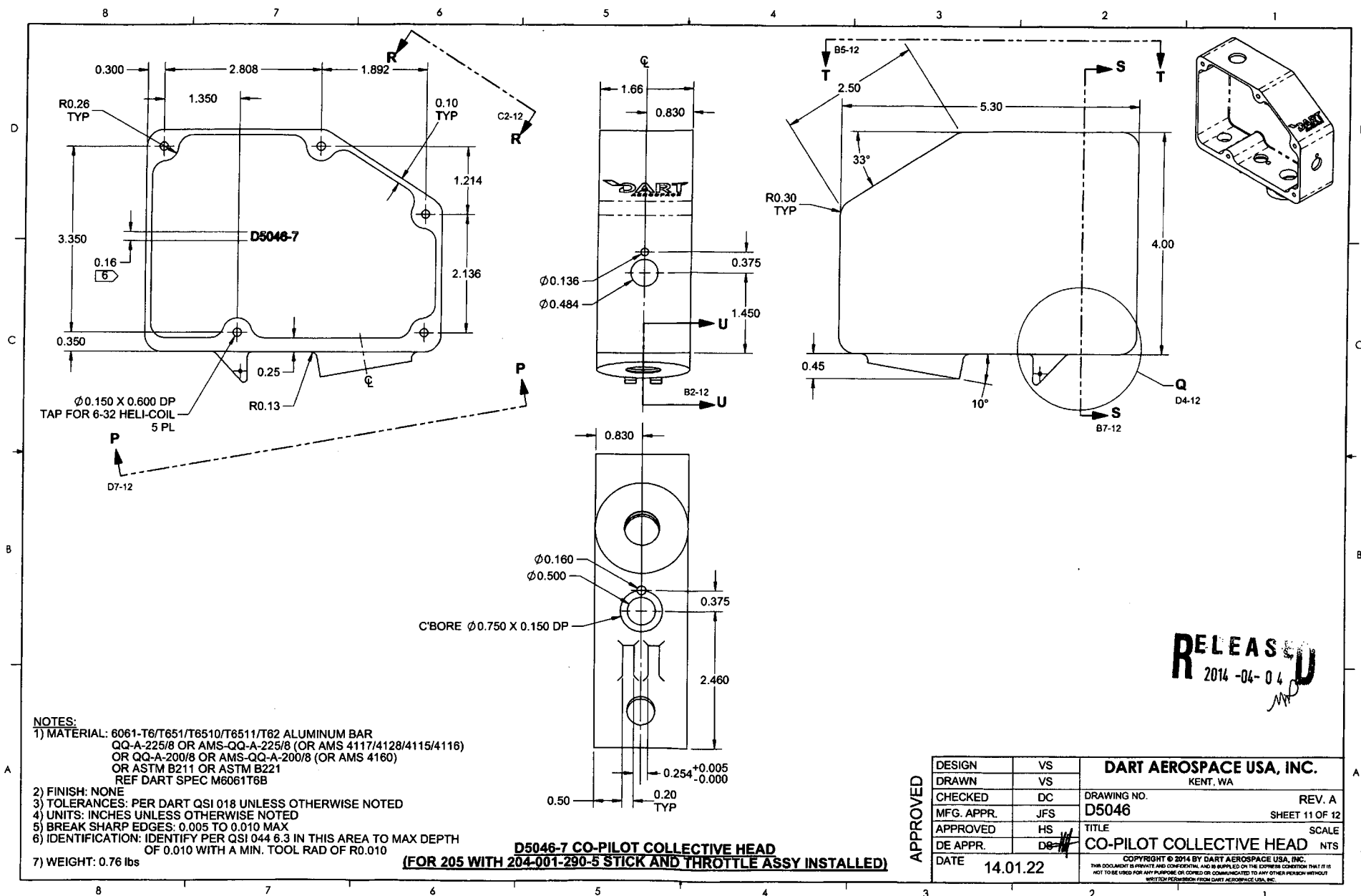
- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.74 lbs
 - 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP

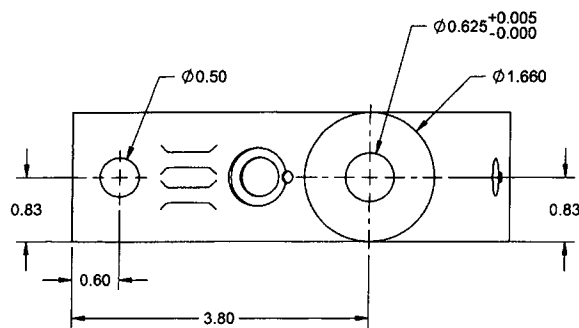
D5046-5 CO-PILOT COLLECTIVE HEAD (EAGLE SINGLE)
DETAIL VIEWS

DESIGN	VS	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	VS		
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 10 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	CO-PILOT COLLECTIVE HEAD	NTS
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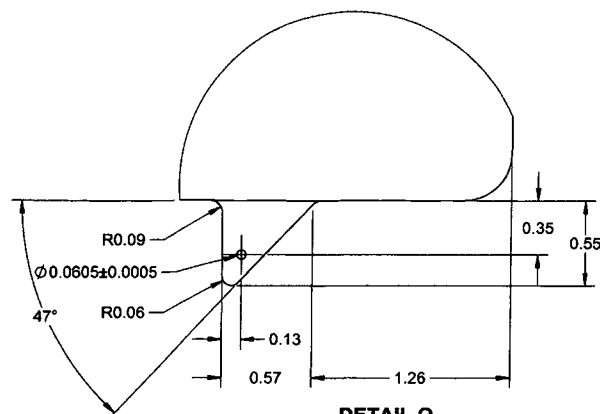
RELEASED
2014-04-04

8 7 6 5 4 3 2 1

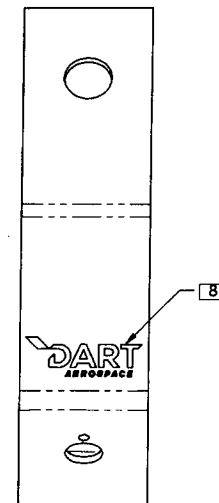




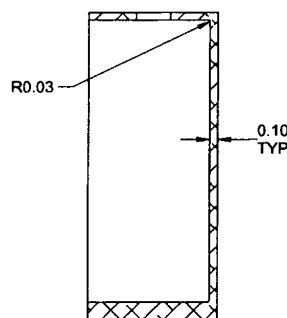
VIEW P-P
C7-11



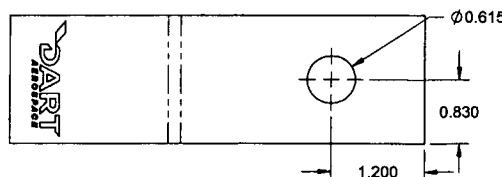
DETAIL Q
C2-11



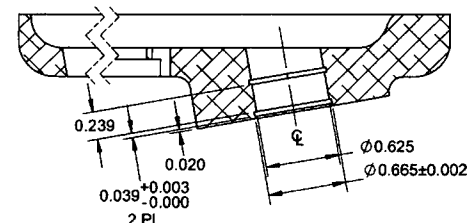
VIEW R-R
D6-11



SECTION S-S
C2-11



VIEW T-T
D3-11



SECTION U-U
C5-11

RELEASED
2014-04-06

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.76 lbs
 - 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP

D5046-7 CO-PILOT COLLECTIVE HEAD
(FOR 205 WITH 204-001-290-5 STICK AND THROTTLE ASSY INSTALLED)

APPROVED

DESIGN	VS	DART AEROSPACE USA, INC.	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5046	SHEET 12 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DE	CO-PILOT COLLECTIVE HEAD	NTS
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DART AEROSPACE LTD		Work Order: 129 563
Description: Co-pilot Collective Head.		Part Number: D5046-3
Inspection Dwg: D5046 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.300	+/- .010	.300	✓		Vern	Fk-01
2.808	+/- .010	2.808	✓		"	"
1.892	+/- .010	1.892	✓		"	"
.10	+/- .030	.094	✓		"	"
1.214	+/- .010	1.214	✓		"	"
2.136	+/- .010	2.136	✓		"	"
.25	+/- .030	.25	✓		"	"
.350	+/- .010	.350	✓		"	"
3.350	+/- .010	3.350	✓		"	"
R.13	+/- .030	.125	✓		R-G	
R.26	+/- .030	.260	✓		"	
Ø.150 x .600 Dp	+ .005 / - .001	.495 x .607	✓		Vern	Fk-04
6-32 Helical	N/A	6-32	✓			
1.66	+/- .030	1.6601	✓		Vern	Fk-04
.830	+/- .010	.830	✓		"	"
2.50	+/- .030	2.50	✓		"	"
5.30	+/- .030	5.301	✓		"	"
4.00	+/- .030	4.00	✓		"	"
1.782	+/- .010	1.782	✓		"	"
1.518	+/- .010	1.518	✓		"	"
.70	+/- .030	.695	✓		"	"
1.100	+/- .010	1.100	✓		"	"
10°	+/- .5°	10°	✓		A-G	

Measured by: 44 9-89		Audited by: 14 9-89		Preliminary Approval:	
Date: 15/02/20		Date: 15/02/20		Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

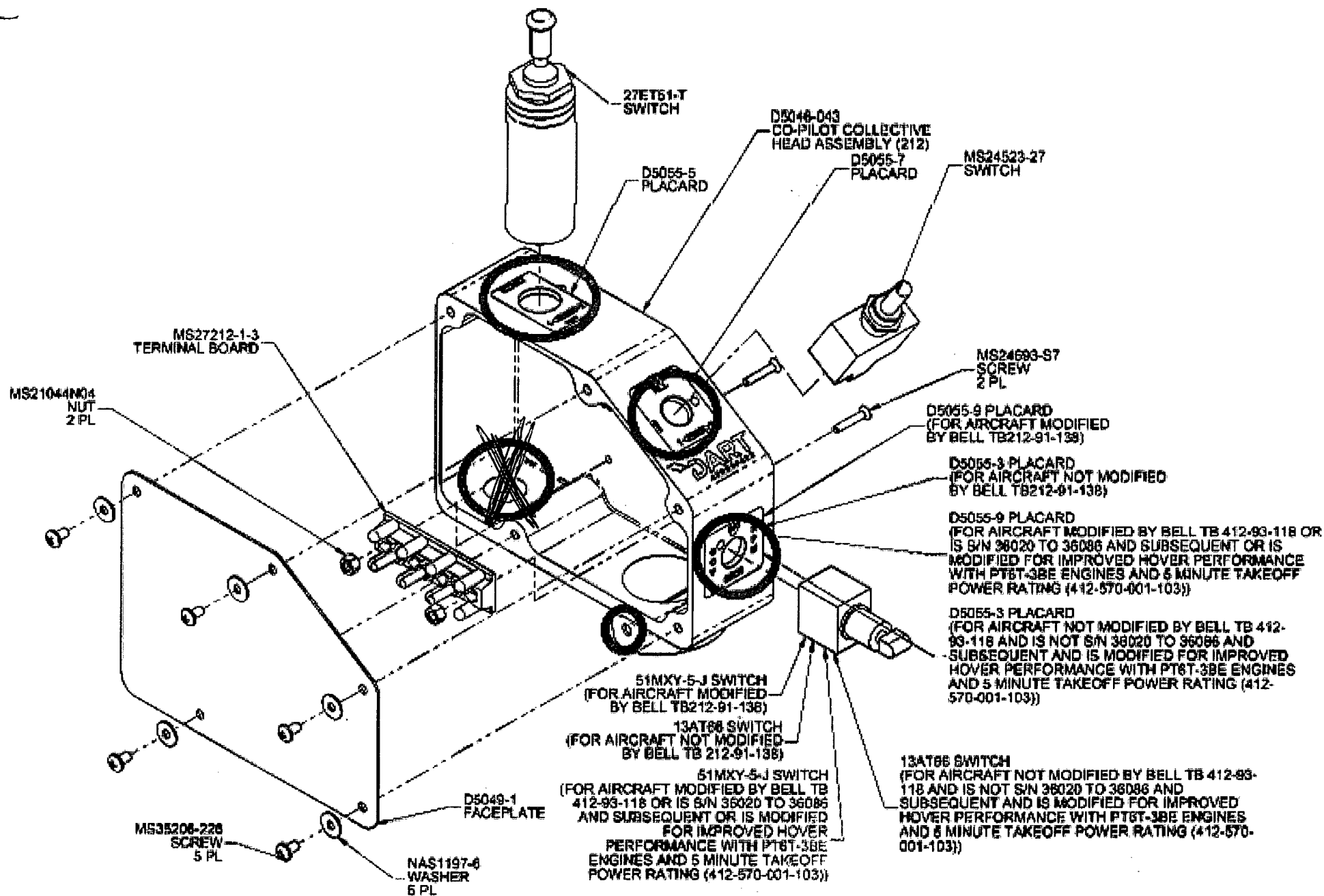


FIGURE 16: D212-803-115 Kit Switches Installation

